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A Study in Civic Training

By

GEORGE ALLEN COE

A Dissertation submitted to the Graduate Board of Clark University, Worcester, Mass., in partial fulfillment of the requirements for the degree of Doctor of Philosophy, and accepted on the recommendation of WILLIAM H. BURNHAM.

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A STUDY IN CIVIC TRAINING

BY GEORGE ALLEN COE

I

School education tends to overestimate the importance of instruction and to underestimate the value of training. William James, some years ago, said, in a public address:

"There is not a public abuse on the whole eastern coast which does not receive the enthusiastic approval of some Harvard graduate. Fifty years ago the schools were supposed to free us from crimes and unhappiness, but we do not indulge in such sanguine hopes to any extent today. Though education frees us from the more brutal forms of crime, it is true that education itself has put even meaner forms of crime in our way. The intellect is the servant of our passions, and sometimes education only makes the person more adroit in carrying out these impulses." (Quoted by C. A. Ellwood, *School Review*, 15:544.)

Instruction may or may not establish a proper attitude toward a matter under consideration, but the essential thing after all is just this establishment of attitude—of truth seeking, of aggressive activity, etc.—rather than only mastery of subject matter.

We cannot tell just how far knowledge affects attitude. A group association test of forty stimulus words taken from civics was given for this purpose to 347 pupils in the schools of Grafton, Gloucester and Pittsfield, Mass., ranging in age from ten to eighteen years. This test we shall call Group Association Test Alpha. The words were so chosen as to not only reveal knowledge of civics but also to show either an attitude of public spiritedness on the one hand or relative indifference on the other. The methods of handling this test and of interpretation of results were like those used in connection with Group Association Test Beta and will be fully described later in connection with the latter. A fair degree of

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GROUP ASSOCIATION TEST ALPHA

Your first and last name

Your age on your LAST birthday Boy or girl

Your grade in School

Below you will see a list of words. They all have to do with civics or public affairs. Most of them you understand. After reading each word please place in the next column, directly opposite it, some other word which it suggests to you. If you do not understand any word just put an X opposite it and pass on to the next word.

So as to make the matter clear to you I have already done the first three. WATER made me think of how clear the water is that I drink, so I wrote CLEAR in the next column, directly opposite water. ELECTION made me think of the place where I vote, a POLLING-BOOTH, so I wrote in the next column, directly opposite ELECTION, the word POLLING-BOOTH. LOYALTY made me think of a very loyal friend, so I wrote the word FRIEND. You do the remaining seven words.

WATER clear

ELECTION polling-booth

LOYALTY friend

GRAFT

FLAG

GOVERNOR

NAVY

APPROPRIATION

VETERAN

JUDGE

When you have finished these hold your pencil up and await the word to turn the page. On the following page there will be other words of the same kind and you are to do the same with them.

Do the same with these words as you did with those on the preceding page.

ARMY.....
VOTE.....
EDUCATION.....
TAX.....

LAW.....
MONEY.....
HEALTH.....
MONOPOLY.....

SOCIAL.....
RECREATION.....
COUNTRY.....
WAR.....

FORESTS.....
CONTAGION.....
IMMIGRANT.....
WAGES.....

WELFARE.....
LIBERTY.....
SERVICE.....
DEMOCRACY.....

COMMUNITY.....
CITIZEN.....
SAVINGS.....
PRIVILEGE.....

COMMERCE.....
SELECTMEN.....
PRESIDENT.....
BONDS.....

TREATY.....
LOAN.....
POSTMASTER.....
IMPROVEMENT.....

STRIKE.....
PENSION.....
TREASURY.....
TRUST.....

COURT.....
HIGHWAY.....
WARRANT.....
CABINET.....

When you have finished put your pencil down and await further directions.

correlation was noticeable between the civic intelligence evidenced by intelligible reactions and social or public-spirited responses ($r = .39$, p.e. .031), but the increase in the number of public-spirited or social responses did not compare favorably from age to age with the rate of increase in civic intelligence; nor was there an appreciable increase of public spiritedness or sociality with age.

Figs. 1 and 2 and Table 4 show the results in detail.

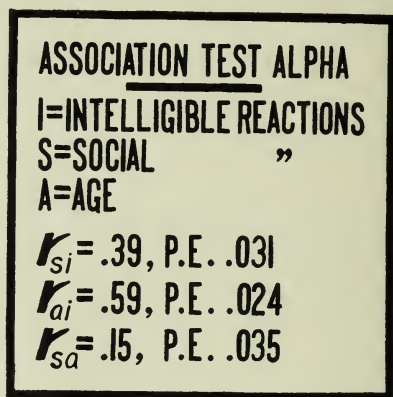


FIG. 1

Progressive schools have afforded us, recently, a better foundation upon which to build. The boys of the McDonough School (23, 250) demonstrated the capacity of pupils to work out complicated problems of government. This kind of practice, coming at a period in the child's development when he is highly receptive, may be the source of much wisdom and social balance in later years. Our most dangerous radicals as well as our worst ultra conservatives are not infrequently excellent students of civics, but they are often lacking in the discipline of experience such as the McDonough School afforded.

In contrast with the McDonough School, where the boys were actually making their own laws, is the school at Abbots-holme, under Dr. Reddie, where the boys were not allowed to govern themselves to the same degree but were trusted to control themselves in accordance with the rules of the school. Even in such a case there is opportunity for experience to operate as a disciplinary factor. The essential thing is that whatever responsibility is placed upon the pupil should be

genuine. Whether it be considerable or not is relatively secondary.

Better known to us is the Moraine Park School, at Dayton, Ohio. This school constitutes in the words of Stanwood Cobb (9) "A wonderful demonstration of freedom, backed up by efficient work as proved in standard tests." The aim here is to develop attitudes. Student self-government prevails and citizenship is learned by practising citizenship. The pupil is self-supervised, and learns to govern his own comings and goings. The governmental machinery consists of a community meeting and a commission form of government with a community manager, under whom there are departmental directors. Project work and measurement of pupils according to degree of mastery of the "arts of life" instead of by subjects is a further aid in establishing attitudes of social value.

Still different is the Francis W. Parker School of Chicago, which provides a rich community life, where education is regarded as a preparation for citizenship and social co-operation. Here, too, we find student government, but, more important, social production as well. This latter is secured by group project work. Each child's work is regarded as a contribution to the group. No marks are given. Attention centers on results rather than on rewards.

These schools are typical of others which are not so well known. They are far ahead of most experiments with school cities, republics and the like, which, as ordinarily organized and conducted, have little other than dramatic value. For citizenship training it is not essential that activities in which the pupils participate be of a political or civic nature. It is rather desirable that the school work be so organized and the program so arranged as to allow a large amount of latitude and freedom and ample opportunity for essentially the same kind of relationship that exists between most adults. We are not attempting to train policemen, mayors, congressmen and the like, but citizens. Citizens must know how to live together and work together in homely fashion, meeting on all levels and in every kind of activity. No one activity has much greater civic training significance than another *per se*. It is rather the degree of co-operation and mutual interest in all activities which is significant. Colin A. Scott has, therefore, been advocating for years the formation of groups, which groups would be analogous to the new relationships in which one finds oneself involved in ordinary society.

"We do not find people in offices and parlors getting up and asking questions to which everyone knows the answer, or is expected to feel

disgraced if he does not. The individual who should become seriously enamored of the ordinary school practice would find little room for himself in the world of real life. The particular things that are done in school do not cultivate even a working majority of the habits of action which are used in the world at large. This is not because the habits of action of the school are superior to those of the world, but simply because they are narrower, and better suited as a preparation to the life of a primitive clan than to that of a highly differentiated society. They are the result of the pressure of the causal forces of society, passed on by the teacher without consideration of the actual effects which are being created in the social organism of the school itself.

"In real life, on the contrary, society at its best organizes in groups in which each individual in the various groups to which he may belong, finds himself in contact with others whose weaknesses he supplements or whose greater powers he depends upon. The idea of such a group as a whole is not necessarily contained in the brain of any single member, and as the idea develops by social interpenetration it becomes, in all its many-sidedness, too large for any member to contain. The function that each plays is a different one, and the thought of each concerning the group is likewise different. And yet such groups tend to stick together. They exercise some form of moral restraint or attraction upon their constituents, who yield them an obedience sufficient to maintain their cohesion for years, and sometimes for generations. If the school is to prepare for society as it is, it would be natural to expect that some such form of social activity, however embryonic, should be found as a necessary feature of its life.

"This, however, is a feature of organization that cannot come from the direct impact of outside pressure. Neither society as a whole nor its personification in the teacher, can say: Go to; let there be groups. Let us put so many in one group and so many in another. Let us select individuals according to their capacities and give them work that will be suited to their needs. No, a real social group cannot be reduced to a mere instrument of the teacher, a means or a method for accomplishing certain preconceived purposes. It is necessarily too many-sided for that. Nor can the constraint required and the obedience developed originate from the outside of the group. It must be a part of its own specific constitution and necessary to its maintenance. The group must be capable of going to pieces, a thing it cannot do if it is to depend on the authoritative backing or the constraint of the teacher. Indeed it is only when it can go to pieces that there is any reality in the effort to hold it together. It is only then that there is any true loyalty developed. It is only then that its members feel the characteristic group restraint, and submit their private wills for the good of the whole. True responsibility, and even obedience of the highest type, is felt only when the group as a whole is free." (31, 15.)

Group work, but not as free as that proposed by Scott, has been utilized by Kerschensteiner, in Munich. Kerschensteiner, in his industrial school, has aimed at the creation of an *Arbeitsgemeinschaft* or community of workers. His idea is to apportion all the work of the school out to groups of say four, six or eight pupils, holding the group rather than the individual responsible for the results obtained. He believes that the group will exercise a sufficiently strong pressure upon the individual so that he will be forced, in a natural and usual way, to discharge his responsibilities. To quote:

"Another moral quality, especially in regard to the best pupils, is put to the test in a way that is impossible in our present school system. I mean the consciousness of responsibility. Not only the leaders of the separate groups but each member of them is daily made aware of the fact that the work done is of importance for him as an individual, but also goes to make or mar the quality of the work of the whole group. Our present day schools are hardly able to awaken the pupil to the idea of responsibility; far less are they able to produce in him a real, live feeling of responsibility." (21, 43.)

Kerschensteiner admits that we should not form such communities or groups before the pupils reach a sufficient degree of maturity. He also plans to guard against binding together in groupings community elements which are too widely different in capacity. In order to take care of those who possess unusual abilities he would place them in groups by themselves so that more might be required of them.

Kerschensteiner's experience has led to the conclusion that this group work has a desirable civic result and he regards such education as specific training for citizenship. His work, however, differs from Scott's plan in that Scott feels that the work should be self-organized. Scott reports the self-organized group work of pupils in an interesting instance. (31, 106.) Parallel to this I am able to report from my own observations a mixed first and second grade class which enjoyed, several times daily, a "free period" during which they were allowed to do anything they wished. They broke up, most of them into groups, though a few remained by themselves, and engaged in multiform activity, such as games, drawing upon the blackboard and construction work of various kinds, but invariably doing something of value and as invariably carrying on their activities in such a way as to not disturb each other. The room could not be quiet under these conditions, but it was orderly. The general atmosphere of consideration for each other was better than I have seen prevail at some teas. Scott also shows (31, 110) at some length, how homogeneous groups can and do exert sufficient pressure of a social nature upon their members to serve as a positive disciplinary force. This is in reinforcement of Kerschensteiner's observations.

II

A number of experiments have been made which indicate clearly the stimulating effects of the group upon the individual. The first of these appears to be that the group constitutes a stimulus to greater productivity. (3.) Mayer (26) in dictation, mental and written arithmetic, memory tests and combination tests, found that twenty-eight schoolboys averaging

twelve years of age were able to work more quickly and do better work in groups than alone. Triplett (34), working with forty children, found that they turned a reel more rapidly, though in some cases not as economically of effort, when they worked in the presence of another child than when they worked alone. Moede (28) more recently, experimenting with rate of tapping and with the ergograph, secured better results in group work than with the individual. In experiments with arithmetic he obtained no better average from the group work but the average deviation from the central tendency was reduced. Moede also found in repeated tests, that while grouping of any kind appeared to secure greater production than individual work, small groups were superior to large in this respect, and subgroupings within the group were, as might have been expected, still more effective.

During the spring of 1919 an experiment was conducted by the writer in the public schools of Grafton, Mass., the object of which was to determine the civic and other effects of group work. Two seventh and eighth grade rooms and one sixth grade room were chosen for the field of operations. One of the seventh and eighth grade rooms (26 pupils) was placed on a co-operative basis. The pupils were allowed to freely assist each other and to work together. Their work was done in groups of from two members to the class as a whole, but averaging about six members. The groups were spontaneous both in formation and operation. Neither the individual pupil nor the individual group received any credit for work done. Report cards and individual grades were abandoned. Instead a class score was kept which the pupils strove to raise. This put a premium upon grouping being such as to include and improve the work of poor members of the class, for otherwise they would adversely affect the score. Class records for each subject were kept in the form of graphs showing median and quartile tendencies from day to day and from week to week. The pupils were encouraged by a rising line in any record and concerned over any drop. A general rising tendency of the three lines with an additional tendency to convergence of the three became a source of elation. This class was under the guidance of a teacher of years of experience and a reputation for knowing children and doing good work with them.

The other room of this grade (28 pupils) worked under the traditional form of government and discipline. Individual reward in the form of high marks and punishment in the form of low ones afforded the stimulus. The teacher of this room was also very capable but of a different type. The first

room is referred to in the following tables as the co-operative or "C" group, while the second is referred to as the non-co-operative or "N."

The sixth grade room (38 pupils) was divided into two groups of roughly equal ability. This gave opportunity to check up such differences as might be due to teacher personality or other local influences, and also provided the experimenter with greater range so far as pupil age was concerned.

Between the two seventh and eighth grade rooms there was no possibility of rivalry entering into the work for they were unaware that they were being in any way compared. The "C" room simply realized that they were working under a new plan. An element of rivalry may have entered into the work of the sixth grade room as the two groups were aware of the difference in treatment, but it is improbable that it would be very keenly felt. All the rooms knew that they were likely to be tested frequently and the class scores determined. They were aware that they were expected to maintain the departmental standards of both quality and quantity, but they were unaware of any experimental study being made.

At the outset all three rooms were measured by the Monroe Arithmetical Reasoning and Silent Reading Tests. The seventh and eighth grades were also measured in English composition by the Hillegas Scale. The English composition was measured again every three weeks until the end of the ninth week. The reading and arithmetic were tested again at the end of fourteen weeks. Tables 1, 2 and 3 show the results.

TABLE 1. ARITHMETICAL REASONING. MONROE TESTS

		GRADE VI		GRADE VIII	
		<i>C group</i>	<i>N group</i>	<i>C group</i>	<i>N group</i>
Test 1	Upper quartile	21	29	23	24
	Median	18	21	17	19
	Lower quartile	11	11	9	14
Test 2	Upper quartile	24	32	30	32
	Median	21	25	25	25
	Lower quartile	12	13	12	15
Amounts gained	Upper quartile	3	3	7	8
	Median	3	4	8	6
	Lower quartile	1	2	3	1
Percents gained	Upper quartile	14	10	30	33
	Median	17	19	47	32
	Lower quartile	9	18	33	8

TABLE 2. SILENT READING. MONROE TESTS

Rate (speed)		GRADE VI		GRADE VII		GRADE VIII	
		C	N	C	N	C	N
Test 1	Upper quar.	81	81	109	108	153	152
	Median	70	69	102	99	134	139
	Lower quar.	63	60	92	84	121	129
Test 2	Upper quar.	127	121	119	114	160	161
	Median	116	102	105	101	149	149
	Lower quar.	102	91	93	85	136	133
Am'ts gained	Upper quar.	46	40	10	6	7	9
	Median	46	33	3	2	15	10
	Lower quar.	39	31	1	1	15	4
% gained	Upper quar.	57	49	9	6	5	6
	Median	66	48	3	2	11	7
	Lower quar.	62	52	1	1	12	3
Comprehension Test 1	Upper quar.	14	20	22	22	28	31
	Median	10	16	18	18	24	27
	Lower quar.	6	12	13	11	19	21
Test 2	Upper quar.	26	22	27	27	35	38
	Median	22	17	21	21	30	32
	Lower quar.	17	14	18	16	25	29
Am'ts gained	Upper quar.	12	2	5	5	7	7
	Median	12	1	3	3	6	5
	Lower quar.	11	2	5	5	6	8
% gained	Upper quar.	86	10	23	23	25	23
	Median	120	6	17	17	25	19
	Lower quar.	183	17	38	45	32	38

(In these reading tests the returns from grade six appear to be abnormally affected. They have therefore not been taken into account in the conclusions reached. All decimals in the foregoing have been figured to the nearest whole number.)

TABLE 3. ENGLISH COMPOSITION. HILLEGAS SCALE

GRADES VII-VIII	CO-OPERATIVE GROUP				NON-CO-OPERATIVE GROUP			
	1	2	3	4	1	2	3	4
Test No.								
Upper quartile	59	67	66	64	63	68	68	60
Median	53	53	52	56	51	52	56	54
Lower quartile	43	49	48	48	43	50	40	44
Loss or gain, Upper quar.				5				-3
Median				3				3
Lower quar.				5				1

It is at once apparent that there was no marked advantage, so far as subject achievement was concerned, for either group or method tested. On the whole the co-operative classes

showed a slight advantage, although from test to test and from room to room it varies. There was a tendency in both types of work for the "fringes" of the classes to make greater gains than the middle range, with the tendency somewhat more marked in the case of the co-operative classes than in the case of the non-co-operative. That is, the distribution of test scores tended to become more discrete in the upper half of the class (or at least more extended) and to bunch upward in the lower half. This might bear the interpretation that group work is a stimulus to the leaders as well as to better work on the part of the relatively inferior.

Standards being as well maintained under the co-operative plan as under the usual one it was then given a certain amount of publicity and other teachers who desired to try it were allowed to do so. After three months of further continuation of the work in rooms where the measurements were made and of varying degrees of casual experimentation on the part of fourteen other teachers the teachers and pupils affected were asked for their candid opinion in regard to the co-operative organization of classes. Their replies, treated fully in the 1919 Annual Report of the Superintendent of Schools, Grafton, Mass., brought out as evident results: a readiness to bear responsibility, increased courtesy and consideration, encouragement of the timid and bashful, co-operative effort, more interest, and, in some cases, scholastic improvement.

The group work of the Grafton pupils was integrated by three factors. In the first place the work of any given group or constellation of groups constituted a common task. In the second place every member of every group felt his own personal responsibility for the result secured and any failure meant a perfectly apparent loss to the community. Third, the groups were spontaneously formed around momentary leaders. Integration depends upon leaders. Leaders may mean domination. But domination is less likely and a higher quality of leadership more probable where groups are small and frequently changed, or where they are spontaneous in their formation and capable of just as spontaneous dissolution when the task is completed.

One hundred twenty-nine of those to whom the Alpha Test was given were pupils who had had the advantage of from six months to a year or more of this co-operative work in Grafton. These pupils scored slightly lower in the number of intelligible reactions, but they scored both relatively and actually a little higher in the number of civic-social reactions. The accompanying table (4) and Fig. 2 show this quite clearly.

To test more thoroughly the relationship between what we may call sociality and participation in group activity generally another group association test was constructed. This test, which we shall call Group Association Test Beta, consists of a list of twenty-one stimulus words and an opportunity to indicate the number and kinds of organizations to which the subjects tested belong or ever have belonged. The first eight words, which shall hereafter be designated as Series A, were taken from Test Alpha because they received the largest number and variety of reactions of the stimulus words in that test. These words, with characteristic social and non-social reactions follow:

<i>Stimulus word</i>	<i>Social reaction</i>	<i>Non-social reaction</i>
flag	defend it; my country; our country; loyalty; justice	the thrill it gives me; the first flag; the flag over our schoolhouse; a banner; Stars and Stripes; flagpole; American flag
law	obey; justice; duty	U. S. Constitution; no law, no government; rule; behavior; lawyers; courts; policemen
citizen	obedient to law; one who pledges loyalty to his country; people who work for others; faithful; loyal; one who looks out for the welfare of a town or city	American; citizen of the U. S.; rights; voting; naturalization
welfare	for the good of the town; taking interest in the country; welfare of the public	benefit; good; dental clinic; good luck; society that does good; for your own good
service	soldiers that went to France; O'Connor (local hero); every citizen should give his service to his country; Red Cross	don't be late delivering papers; church; servants; street cars; a favor; forest service
social	to be always pleasant; amiable; friendly; helping each other	a party; club; church; gathering; society
graft	disloyal profiteers; profiteers are traitors	member of political party; get away with money; prohibition laws being enforced; stealing; rich; getting something that isn't yours
community	collection of people helping each other; be a good member	locality; vicinity; lot of houses and stores; community house; group; school; people get together and sing

The provision was made in Test Alpha for space for explanation of reactions. A study of the explanations given, together with questioning where it seemed desirable, gave a

number of valuable suggestions upon which to establish an interpretative viewpoint in both tests. A number of the reactions might at first appear social which were interpreted as non-social. Rigid exclusion was practised wherever there appeared to be the slightest occasion for doubt. A different policy might have been adopted and justified, but this one was chosen because of its relative simplicity and its greater definiteness. Only those reactions were taken as social which could be so interpreted from the probable viewpoint of a subject of the age of one reacting to a given paper. Criteria for judgment on this point were developed from general experience with children on the part of the examiner and on the basis of the explanations and interviews in connection with Test Alpha. By this means earnest attempts were made to avoid misreading adult interpretations into child reactions. Language is a social tool, and from the adult standpoint anything may be social.

Another difficulty arose out of the possibility that some of the acceptedly social reactions might be mere phrases that please, but this is probably offset by the numerous cases that were social, but, because of doubt in interpreting, were discarded as non-social.

The next thirteen words, intended to test the degree of group participation, with characteristic responses, follow:

<i>Stimulus word</i>	<i>Group-participation reactions</i>	<i>Non-Group-participation reactions</i>
rule	school regulation; a law to keep us out of trouble; baseball player put out of game; for everybody to obey	slide rule; make a straight line; keep to the right; military life
school order	obedience; silence; don't smoke	teacher; tells your character
score	playing baseball; we trimmed the Boys' Club five	2 to 1; 11 to 2; keeping score at games; basketball; a number
double play	two out at once; when I was put out in one	baseball; double score; when I saw the Braves play
sacrifice	sacrificing myself for team work; when we let ourselves be out to advance another	worship; to give up something you want; soldiers; to die for someone else; for welfare of others
run	going on an errand for my mother	to move fastly with the legs; chasing a street car; a score of one in baseball; exercise
gang; crowd; the gang; the B R crowd I go "the bunch" with; our five		lot of boys; a bunch of fellows; the Greendale boys
initiate	ducked, ran gantlet, branded with ice; when Owen joined our club	joining a club; make fun

errand	for mother; hurry to the grocery before it closes; when I lost some money	running; go after; service
chums	Evelyn and I; my chums	particular friends; boys or girls who go together
member	our bunch	to belong; Sunday school class

In order that our measurement of group participation be more accurate each individual's returns from this list of thirteen were first interpreted in the light of his report as to the number and kinds of groups to which he belonged or ever had belonged. Membership in a family of brothers or sisters was interpreted as another group membership. This was a marked correlation ($r = .56$, p.e. .0204) between group membership as revealed by this report and group participation as indicated by the reactions. But neither group membership as indicated by the check list nor group participation as indicated by the returns to the stimulus words appeared to give a sufficiently accurate measurement of the thing we were trying to measure in relation to sociality. In the first place "membership" is such a loose and indefinite term with children and adolescents that it could not be accepted as an accurate indication of serious participation. In the second place the difficulty of interpreting returns was, even with the help of the check list of membership, therefore, as great if not greater than in the case of the social versus individualistic responses to the eight words of Series A. The final plan adopted was to accept those reactions only which were unmistakably such and average the returns thus secured with the number of groups to which the individual belonged. The returns finally secured by this process we have designated as Series B.

Regarding the whole test we should note that inaccuracies are inevitable, but by a constant exclusion of doubtful cases in our interpretation of each series we are reasonably certain of the reliability of our returns from a sufficiently large group, and we are reasonably clear as to what in each series is being compared. A non-social reaction to any word or list is not to be interpreted as indicating that any one reacting subject is non-social. An association test of this sort depends entirely upon chance verbal reactions and they cannot be a very accurate measure in themselves of any one individual's tendencies other than for the given moment. The absence, in a group test, of reaction time information, is a serious defect from this standpoint. On the other hand, it seems reasonable to accept such returns from a sufficiently large number of cases as an indication of tendency. The number of

GROUP ASSOCIATION TEST BETA

(Use pen and ink)

Full name.....Age last birthday

Your grade in school.....How many brothers and sisters have you?....

Write opposite each word or phrase in the following list whatever it calls to your mind.

flag.....

law.....

citizen.....

welfare.....

service.....

social.....

graft.....

community.....

rule.....

school order.....

score.....

double play.....

sacrifice.....

run.....

gang.....

crowd.....

initiate.....

errand.....

chums.....

member.....

"the bunch".....

Put an X after each kind of organization in the list below, of which you have ever been a member.

baseball team.....charitable society.....musical club.....

basketball team.....church club or society....canning club.....

football team.....military company.....sewing club.....

track team.....sporting club.....social club.....

hockey team.....secret society.....committee.....

any other team.....camping party.....class.....

scout troop.....gang....."circle".....

any other club or society....

cases necessary to demonstrate this would depend, of course, upon the nature of the distribution of the returns, the degree of correlation indicated and the probability of error.

Test Beta was given to 517 pupils in the public schools of Grafton, Hopedale and Worcester, Mass., and Thompson, Conn. These pupils ranged in age from twelve to eighteen and over. The Pearson coefficient of correlation of sociality as determined by the reactions to Series A and age is barely significant but low, though somewhat higher than it appeared in Test Alpha. That between group participation (Series B) and age is higher. But the correlation between sociality and group participation is marked. These correlations are all shown in Fig. 3, as well as the correlation between sociality and group participation with the age factor eliminated by the

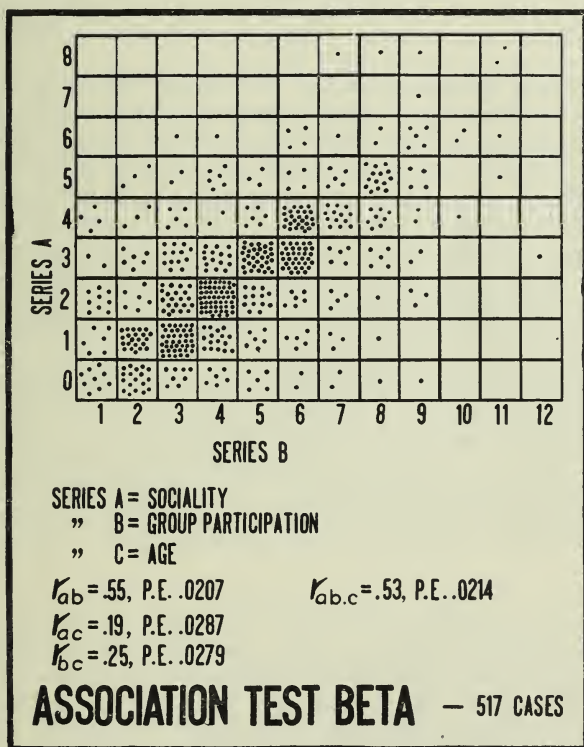


FIG. 3

method of partial correlation, and are offered as a part of the specific contribution resulting from the application and treatment of our tests.

The coefficient of correlation, however high, does not indicate which of the two factors is the controlling one. Sociality may be the result of group activity, but as most of this group activity was purely voluntary it might easily be asserted that it may be the result of the sociality of the pupils. However, in view of the observations and experience of men like Kerschensteiner and Scott and of the even slight degree of evidence resulting from the class group training in Grafton as shown in Fig. 2 and Table 4, it does not appear unreasonable to accept the group activities as causal, and to conclude that the group constitutes a stimulus, not only to greater productivity, but also to sociality.

III

Heretofore consideration of the social effects of group activity has been based upon purely empirical observations. These observations have been made in some detail by persons whose reliability and competence are beyond question, but like empirical data commonly they need to be reinforced by some kind of objective evidence. The group association tests Alpha and Beta have afforded us such reinforcement, but they themselves, in turn, have been demonstrated to have value as a means of measurement in matters of this kind. The tests as given and rigidly interpreted have revealed the existence of marked correlations. These correlations are not produced by the tests, but, rather, are uncovered or demonstrated by the tests and statistical treatment. If the tests reveal such correlations then it is evident that they have value. We may, therefore, state that we have found in the group association test, properly administered and carefully interpreted as described in the previous section, a reasonable means of measurement of the bearings of an educational factor.

As a test within a test, to measure the accuracy of our returns, a comparison was made of the age-sociality correlation coefficients for the two tests. Series A of Test Beta was taken from the list of stimulus words of Test Alpha. Therefore, if the tests have measuring value the correlation of sociality with age should not be radically different, though not necessarily exactly the same, for each test, even though they be given, as they were, to a different personnel. (Only

31 of the 347 Alpha subjects are included in the 517 Beta subjects.) The results were:

Alpha sociality-age (SA), $r = .15$, p.e. .035

Beta sociality-age (AC), $r = .19$, p.e. .029

As the other matters correlated were not identical in the two tests we could not demonstrate them in the same way, but taking into account the nature of correlation itself and the notable and definite coefficients we have secured we are prepared to propose that the application of the group association test and biometric methods to the measurement of the civic effects of group work and the consequent demonstration, not only of these effects but also of the value of the tests themselves, constitutes the specific contribution of this study.

Such tests might be applied to such problems as the relative social effects of groups of varying sizes and kinds, or the civic effects of different types of community life, or the comparative social effects of the group upon its superior and inferior members. Especially by the use of the method of partial correlation it would be possible to determine the degree of group influence in comparison with a larger number of factors than we have taken into account. This type of test may also be applied to the measurement of the influence of subject matter, teachers or administrative factors as affecting pupils in different ways, and may have value as part of a psychological examination and analysis of pupils. The chief advantages of association tests are the infinite variety of form they may assume to meet various conditions, the ease and quickness with which they can be made up for any material, and the readiness with which they may be given to young pupils. On the other hand their chief difficulties will always be (1) that of proper interpretation and hence of scoring, and (2) their inapplicability as group tests to any but very large groups. The problem of proper interpretation also creates an administrative difficulty, for one person must ordinarily be relied upon to do all the scoring unless some adequate control can be established.

IV

We have every reason to believe that normally one who is a member of a sufficient number of groups—who is a conscious participant in their activities—will develop a gradually increasing larger social consciousness, and the best there is in patriotism is to be found in just this type of social response. Dr. W. H. Burnham believes the training secured in the

smaller groups to be the best sort of preparation for social functioning.

"Whenever in the team sports the individual player sacrifices his own desires and his own interest for the success of the team, that is patriotism, and whenever the pupil in the school sacrifices his own interest for the sake of the school as a social group that is patriotism. The significant thing is that sacrifice of personal interest in the smaller groups, that is, training in patriotism in the smaller groups, is the best sort of preparation for the virtue of patriotism in the larger groups, the community and the state." (7.)

Dr. G. Stanley Hall goes even further and proposes that any attempt to develop the larger social consciousness too early may be disastrous. He says:

"Group selfishness is the first step in overcoming individual isolation. . . . For most, humanity is too large a sphere of altruism to have more than a sentimental development, and today, when so many interests are taking on cosmic dimensions, may be liable to weaken demotic or yet narrower spheres now within the range of practical everyday duties." (14, II, 430.)

But we are compelled, at this point, to consider the danger of arrested development, not only because of a precocious enlargement of the individual's social field, but also because of lack of normal stimulation to enlargement and development into a socially adjusted individuality. Optimal stimulation will normally arise out of identification with a sufficiently large number of groups of different kinds. Dr. Hall further proposes that

"Every youth should connect himself with as many other associations of diverse kinds as is practicable, for at this age, while individuality may be lost in one group only, it is saved and developed by several." (14, II, 430.)

Groups are not bound by nature to enlarge themselves into society as a whole. Nor do we usually consider society as a whole by any sort of analogy with any of the groups of which we are members. On the other hand the individual normally should integrate his various group connections into what is eventually society as a whole for him. This integration is effected by a process whereby he is himself a field of group interpenetration for his several groups. While one group can only very partially represent society and can serve only to that degree as an educative force, an ultimate integration of groups such as we here suggest will not only bear a greater likeness to the larger social whole but will also afford an increasingly adequate educational stimulus. Further, the gradual disintegration of any group, as all groups do disintegrate

eventually, will not, under such a situation, deprive the individual of normal stimulation. His energy would be diverted into remaining social channels in response to remaining stimuli.

V

We have shown in the foregoing the importance of the factor of group training in civic education. Modern psychology affords a basis for such training in recent studies of conditioned reflex, mental tendency, *Einstellung* and the like, which, in turn, are very closely related. To the ordinary teacher, engaged in training citizens, the term conditioned reflex may convey little meaning. It is a product of the physiological laboratory of Pavlov, in Russia. Pavlov's experiments were performed upon dogs and the nature of their results may be, perhaps, best expressed in the following quotation from Burnham:

"If I give a dog a piece of meat, immediately the salivary glands of the animal begin to function and to secrete saliva. This is an ordinary reflex act. Now, if every time I feed the dog meat I ring a bell, after a time I may ring the bell without giving the meat and yet the saliva reflex will occur and the saliva be secreted. In the latter case an association has been formed between the auditory stimulus of the ringing of the bell and the ordinary stimulus of the meat. Psychologically the difference between this reflex and the simple reflex is that, in the former, lower centers alone function; in the latter, the connection between the peripheral stimulation and the response of the gland is mediated by the brain cortex.

"The ordinary reflex act Pavlov calls an unconditioned reflex. The odor or taste of meat is a biologically adequate, or, as Pavlov calls it, an unconditioned stimulus; the secretion of the saliva, the natural reaction. The salivary reflex on occasion of the ringing of the bell without meat he calls a conditioned reflex. This is due to the association of the indifferent stimulus of the bell with the biologically adequate stimulus of the food; and the ringing of the bell is called a conditioned stimulus." (5, 450.)

Since the experiments of Pavlov, Krasnagorski at Petrograd, Dr. Mateer at Clark (25), Watson at Johns Hopkins and others have made extensive experiments with children and have secured results similar to those of Pavlov. Many forms of response are possible and variations in procedure and in result of many kinds have been tried and secured. For instance, even with a dog, Pavlov found the stimulus can be made to produce a reaction at a certain time later, say two or three minutes or more, so that a memory element is involved.

The conditioned reflex is a factor in everyday life, ubiquitously and constantly observable. Some of these responses date from the very earliest years, during which Watson believes personality is formed. We are offered a very interesting

account by Harvey O'Higgins (29, 153) of a man who was morbidly critical of everything connected with his meals, and who was especially irritable towards his mother as a result of the unpleasant conditioning of his first taking of food. His mother had been unable to get him to nurse normally and had been compelled to feed him with a spoon. This was accompanied by fits of colic, screaming, etc., and his mother and feeding both became inseparably associated with discomfort. Similarly we have examples of children who have experienced excessive expressions of love from their parents, leading to a craving for indulgence and adulation, and perhaps to Narcissism. Such cases make the parents and, perhaps, even later marriage partners, slaves.

The school affords countless opportunities for the formation of both good and bad conditioned reflexes. Witness the twisted postures adopted in the course of premature first efforts to write in the lowest grades, or the lad who can only recite either with his hand on his desk or when he is on his feet, or the more facile use of good English within the restricted limits of the English class, or the aid of a bit of forbidden chewing gum to concentration of attention.

The conditioned reflex, however, is not always positive in its action. Its negative or inhibitory action is just as common, and not improbably more serious. Meumann reports a case where a hostile teacher tactlessly introduced a boy to his new teacher in such a way as to make his success in the new room impossible for him. Not until he changed his school was it possible for him to do his usual good work. (6, 484.)

The amazing success of some "new" methods may be partly due to the removal of inhibitions that have grown up around the old ones. New methods are notoriously more successful when first initiated. If this success is largely due to a removal of inhibitions it would compel us to give attention to the consideration of whether or not inhibitory conditioned reflexes have, because of a greater amount of emotional accompaniment, a greater influence upon the school life of the child than many of the positive ones.

Applying the conditioned reflex to our civic training the first thing that occurs to us is the necessity for making effective in school those associations which we wish to be effective outside of and after school. The school should establish situations as nearly those of normal society as possible and afford training and experience in reacting to those situations. They will then become the conditioned stimuli for the kind of civic response outside of school which has been given in school. The older members of large families, as a result of

training, are notoriously more ready, throughout their lives, to assume responsibilities. The leaders in our urban life, for years, have been not only frequently from large families but surprisingly often the products of rural communities where they had early training in assuming responsibilities on the farm. Less comforting is the reflection that so many of our younger politicians have had training as urban gangsters, and there received a training that has been denied the generality by the schools.

If the school fail to give such training and experience, and especially if it fail to give a normal opportunity for putting into effect normal social responses its very subject matter may well become a conditioned stimulus to a non-social reaction. Such a non-social reaction may shortly become inhibitory of ordinary social responses, and the individual may develop a degree of uncertainty in regard to the purposes, propriety or desirability of different kinds of reaction—an uncertainty that he may delude himself and others into believing due to rationalization, especially if he has had an excellent “book course” in civics and the like. But his real difficulty will be a lack of the proper conditioning stimuli because needed associations have not been established. (4.) The man in this situation would be described as hesitant. Hesitancy and uncertainty are closely allied to fear, and fear of the wisdom or propriety of a few social responses is all that is needed to provide an ample number of conditioned stimuli to maintain a more or less continuous response in the form of a socially unfortunate “set” which will interfere with the social efficiency or activity of the individual. We have illustrations of this in the following cases:

Case 1. Sickly boy; too weak to be subjected to school conditions. Tutors by his sister. Grew up into a timid, shrinking boy. Father finally alarmed and managed to get him to join a Boy Scout patrol. Group activity and actual accomplishment made him over until he became the patrol leader.

Case 2. Family of Scandinavians had just immigrated to America. Two boys were sent to school. Understood no English. Schoolmates teased them at recess till they took to hiding throughout each recess period. A boys' club leader managed to get them into a Scout patrol where a different spirit prevailed. They learned how to co-operate and took their places in camping parties, basketball teams, etc. Became socially efficient, and were later instrumental in getting their parents into night school and on the way toward naturalization.

Case 3. Young lady, member of socially meagre household and the product of an environment with insufficient social stimulus. Fortunate enough to make the winning design for the medal for a public exposition.

First elation turned to later fright at publicity and being thrown into sharp contact with the community as a whole.

Case 4. Young lady of about 20. Owing to her mother's aversion to social life she has been deprived of social experience. Home life refined. An invitation to dinner threw her into a state of pitiable fear. Circumstances rendered acceptance unavoidable. At dinner was so frightened and uncomfortable that she would not, for instance, take cream for her coffee for fear she might spill it. Same young lady would not enter famous metropolitan stores on the occasion of a recent trip for fear she might commit some *faux pas*. List of her imagined possibilities for embarrassment amazing in range as well as in improbability of content.

Case 5. Boy of 12. Restless. Could not restrain tendency to talk and move about in school. Teachers punished instead of studying him. Developed hatred for school. Frequent truant. Further punishment. Regarded by community as a bad case and "different." Ran away and hid in an unused cemetery vault. Lived for several days on results of nightly foraging trips. Discovered and brought back. Superintendent of schools transferred him to socialized schoolroom where group work prevailed. Almost immediately he showed ability, willingly assumed and discharged responsibility. One year later entered high school and had ambition to later go to engineering school.

Instances like these could be multiplied but these will suffice.

Baird (2) and others have shown that a mental set may be established by purely subjective factors. These factors are stimuli just as certainly as objective and external factors, and any stimulus may become a conditioned stimulus. Thus fear and uncertainty arising out of a lack of proper stimuli, such as we have just seen in these cases, may in turn, themselves become improper stimuli. School rules may inhibit impulses to social activity and thus create a whole series of conditioned responses such as the association of an unpleasant affective condition with school and a consequent lowering of school effectiveness, or the association of passivity rather than of activity with learning. These are antagonistic to sociality as well as deleterious influences upon the learning process. In one classroom we may have low productivity, relative isolation and non-application or unsocial application associated. In another we may have higher productivity under social conditions, group activity and production and social responses associated. It is quite possible, under the latter conditions, to establish a civic or social set whereby the individual could be trained to group response in the interest of increased productivity, which is always a pleasurable thing, and thereby work toward an elimination of the hesitancy, uncertainty, etc., that characterize so many people.

It is not what one knows that will make him a good citizen. It is what he will do with that knowledge that will make him either a good or a bad citizen. A civic training such as the foregoing suggests would interfere with individuality to the least possible degree, would place no obstacles in the way of natural superiority, and, on the other hand, it would provide opportunity for the relatively inferior to demonstrate some degree of personal excellence, to share in the success of his group and to effect a very desirable compensation. For all it would provide opportunity for activity, spontaneous association and the development of desirable attitudes. Of course, in practical application it would be necessary to take account of development and mental levels, etc.

VI

In the foregoing pages we have developed the following points:

1. Training is a more reliable basis for civic education than instruction, and training in the form of varying degrees of pupil self-government and group work has been developed in progressive schools with good results.

2. Group work has for some time been recognized as a stimulus to individual activity. The experiments at Grafton and the results of the two group association tests, Alpha and Beta, indicate that it is also a stimulus to an attitude of social response.

3. The use of these tests has thus produced a specific contribution in the form of objective evidence regarding the social value of group work. It has also shown, as a further contribution, that civic or other factors may be measured in their effects or inter-relationships by such group association tests if care is exercised to secure a large enough number of cases and to interpret data properly. The value of these tests, especially when their results are treated by biometric methods, has been demonstrated by the results we have secured.

4. Group work, to be most effective, should be so organized that the individual may be a member of many groups in order to provide the individual with the proper stimulus to enlargement of social horizon without encouraging social precocity.

5. Psychological studies of the conditioned reflex, mental set, and related phenomena indicate that pupils should be trained in social response in order to establish proper effective reflexes and to avoid anti-social inhibitions.

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